Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1   1.   (Currently amended): In a storage system for storing data coupled to a

2   computer system having operating system software capable of executing a data recovery

3   program, a method for increasing the effectiveness of restoration of data after a failure

4   comprising:

5   creating a <u>plurality of</u> snapshot<u>s</u> of the data stored in a particular storage system<u>,</u>

6   <u>each snapshot constituting an image of the data stored in the storage system</u> to thereby provide a

7   first data image;

8   <u>for each snapshot:</u>

9   <u>performing a data recovery operation by applying the operating system</u>

10   <u>data recovery program to the snapshot;</u>

11   <u>if a result of the data recovery operation indicates a successful recovery,</u>

12   <u>then designating the snapshot as being a consistent snapshot;</u>

13   <u>if the result of data recovery operation indicates an un successful recovery,</u>

14   <u>then designating the snapshot as being an inconsistent snapshot;</u>

15   <u>receiving a request from a user; and</u>

16   <u>in response to receiving the request, presenting information for each snapshot</u>

17   <u>including whether said each snapshot is consistent or inconsistent.</u>

18   using the operating system data recovery program, recovering data associated

19   with the computer system to thereby provide a second data image; and

20   combining the first data image and the second data image to provide restored data

21   after the failure.

        2.   (Canceled)

1   3.   (Currently amended): A method as in claim 1 wherein the step of creating

2   ~~a snapshot~~ is performed under control of a host system.

1   4.   (Currently amended): A method as in claim 1 wherein the step of creating

2   ~~a snapshot~~ is performed under control of the storage system.

          5-6.   (Canceled)

1   7.   (Original): A method as in claim 1 wherein the steps of the method are

2   performed by a snapshot management host.

1   8.   (Currently amended): In a storage system for storing data coupled to a

2   computer system having application software capable of executing a data recovery program for

3   that particular application, a method for increasing the effectiveness of restoration of data after a

4   failure comprising:

5   creating a <u>plurality of</u> snapshot<u>s</u> of the data stored in a particular storage system<u>,</u>

6   <u>each snapshot constituting an image of the data stored in the storage system</u> ~~to thereby provide a~~

7   ~~first data image~~;

8   <u>for each snapshot:</u>

9   <u>performing a data recovery operation by applying the data recovery</u>

10   <u>program of the application software to the snapshot;</u>

11   <u>if a result of the data recovery operation indicates a successful recovery,</u>

12   <u>then designating the snapshot as being a consistent snapshot;</u>

13   <u>if the result of data recovery operation indicates an un successful recovery,</u>

14   <u>then designating the snapshot as being an inconsistent snapshot;</u>

15   <u>receiving a request from a user; and</u>

16   <u>in response to receiving the request, presenting information for each snapshot</u>

17   <u>including whether said each snapshot is consistent or inconsistent.</u>

18   ~~using the data recovery program in the application program, recovering data~~

19   ~~associated with the computer system to thereby provide a second data image; and~~

Appl. No. 10/664,312
Amdt. dated August 4, 2006
Reply to Office Action of April 4, 2006

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20   combining the first data image and the second data image to provide restored data

21   after the failure.

9.   (Canceled)

1   10.   (Currently amended): A method as in claim 8 wherein the step of

2   operating the application program data recovery operation is carried out by an agent.

11.   (Canceled)

1   12.   (Currently amended): A method as in claim 8 wherein the step of creating

2   a snapshot is performed under control of a host system.

1   13.   (Currently amended): A method as in claim 8 wherein the step of creating

2   a snapshot is performed under control of the storage system.

14-15. (Canceled)

1   16.   (Original): A method as in claim 8 wherein the steps of the method are

2   performed by a snapshot management host.

1   17.   (Currently amended): A storage system comprising:

2   a storage for storing data;

3   a scheduler for invoking creations of snapshots;

4   a recovery tool for restoring data from snapshots;

5   a manager coupled to the scheduler for processing creations of snapshots and

6   coupled to the recovery tool for controlling the restoring of data, each snapshot constituting an

7   image of the data stored in the storage system;

8   a storage agent coupled to the manager and to the storage for controlling the

9   storage to store and retrieve snapshots; and

10   at least one of an applications program and or a file system program coupled to

11   the manager to allow the manager to invoke one of the applications program and or the file

12   system program to cause it to <u>perform a data restoration operation to </u>restore data under control of

13   a feature of the one of the applications program and the file system program<u>,</u>

14   <u>wherein if the data restoration operation was successful, then the snapshot is</u>

15   <u>designated as being a consistent snapshot,</u>

16   <u>wherein if the data restoration operation was unsuccessful, then the snapshot is</u>

17   <u>designated as being an inconsistent snapshot,</u>

18   <u>wherein status information of each snapshot including whether the snapshot is a</u>

19   <u>consistent snapshot or an inconsistent snapshot is presented to a user.</u>

1   18.   (Currently amended): A storage system as in claim 17 comprising a

2   storage subsystem coupled to a host, and wherein each of the recovery tool, the manager, the

3   storage agent and the at least one of the applications program ~~and~~ or the file system program are

4   included in the host.

1   19.   (Original): A storage system as in claim 18 wherein the scheduler is

2   included in the storage subsystem.

1   20.   (Original): A storage subsystem adapted to be coupled to a host, the

2   storage subsystem for storing snapshot data indicative of a state of data in such storage

3   subsystem at a given time, and for storing other data related to an application program as of the

4   given time, whereby the snapshot data and the other data may be combined later to restore the

5   storage subsystem to a state indicative of its condition at the given time.

1   21.   (Original): A storage subsystem adapted to be coupled to a host, the

2   storage subsystem for storing snapshot data indicative of a state of data in such storage

3   subsystem at a given time, and for storing other data related to an operating system program as of

4   the given time, whereby the snapshot data and the other data may be combined later to restore

5   the storage subsystem to a state indicative of its condition at the given time.